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San Francisco Bay Region

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Gray Davis
Governor

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Craig J. Wilson, Chief
TMDL Listing Unit
State Water Resources Control Board
1001 I Street, 16th Floor
Sacramento, CA 95814

Subject: **San Francisco Bay Regional Water Quality Control Board Comments on
April 2, 2002 Proposed 303(d) List**

Dear Mr. Wilson:

Below are the written comments of Regional Board staff involved with preparing the recommended changes to the 1998 303(d) list for water bodies in the San Francisco Bay Region (Region 2).

(1) All Bay Protection sites that you have chosen to place on the watch list are for *sediment toxicity* (not just *toxicity*, as was indicated in your watch list for sites we originally recommended for the watch list).

(2) Redwood Creek, tidal portion should be listed on the watch list for *high coliform count*, not *E. coli*. We prefer the term high coliform count instead of specific indicators or "pathogens".

(3) South San Francisco Bay Copper De-listing Proposal.

As I mentioned in my email back on April 3, 2002, there is readily available information now, independent of the proposed site-specific objective for copper, which supports the recommendation to de-list copper from South San Francisco Bay, south of the Dumbarton Bridge (Lower South Bay). We could have been clearer about this fact in our staff report. Below is the clarified rationale that we believe supports a de-listing recommendation based on the existing California Toxics Rule (CTR).

The clarified rationale, based on water effect ratio (WER) information, shows that copper levels are below applicable thresholds of impairment south of the Dumbarton Bridge. The prior rationale was that dissolved levels of copper are consistently below the proposed site-specific objective. It is important to note that the proposed copper site-specific objective was calculated by making use of a water effects ratio which itself is part of the current water quality objective.

Technically, the marine chronic criterion for dissolved copper adopted in the CTR is 3.1 ug/L multiplied by a WER (40 CFR 131.38 (b) and (c)(4)(i) and (iii)). The default value for the WER

is 1.0 unless a WER has been developed as set forth in USEPA's WER guidance (US EPA, 1994. Interim Guidance on Determination and Use of Water Effect Ratios, USEPA Office of Water, EPA-823-B-94-001, February 1994.).

The calculation of the proposed site-specific objective for copper relied upon extensive copper toxicity data collected in Lower South Bay. This copper toxicity data was used to compute a WER in accordance with the USEPA guidance. The WER was calculated by computing the geometric mean of the 40 samples taken from two Lower South SF Bay locations, yielding a WER 2.77 for this bay segment. A three-station WER was also computed in a similar fashion by using a third station in the extreme south portion of this bay segment, but this higher WER value was deemed not as protective as the two-station WER.

The lowest WER calculated from the 40 samples was 2.47, which yields a WER-adjusted copper objective of **7.66 ug/L**. Available ambient dissolved copper concentrations in the estuary never exceed even this most protective WER-adjusted CTR objective. The highest recorded dissolved copper concentration in the **690** samples collected in Lower South SF Bay between February 1997 and December 2002 in data collected through the RMP or by the South Bay Dischargers Association was **6.75 ug/L**.

The WER information was readily available at the time of the listing recommendation, but we did not clearly indicate the manner in which this information could be applied to determining impairment status using the existing CTR water quality objective for copper. The WERs demonstrate that bay waters consistently render copper less toxic than in lab waters, and, when used to adjust the CTR copper criterion, justify de-listing Lower South San Francisco Bay with respect to copper. Therefore, there is no procedural basis to reject the San Francisco Bay Regional Board's original recommendation to de-list copper from South San Francisco Bay, and we urge the State Board to reconsider its preliminary decision in the April 2, 2002 staff report.

Thank you for considering these comments. At the public workshop, stakeholders from the South San Francisco Bay area will be submitting oral and written comments along the same lines. If you have any questions, please contact me at (510) 622-2439 or smm@rb2.swrcb.ca.gov.

Sincerely,

Steven M. Moore, Chief
Policy and Planning Division